

# Office of City Auditor

## **Transfer Stations Cash Handling Operations**

### **Management Letter**

February 28, 1997

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February 28, 1997

Diana Gale, Director  
Seattle Public Utilities  
710 Second Ave.  
Dexter Horton Building  
Seattle, WA 98104-1886

Dear Ms. Gale,

This letter summarizes our review of cash-handling operations at the City of Seattle's two solid-waste transfer stations. We performed this review both in response to a citizen complaint about a cash receipting error at the North Transfer Station and also as part of our on-going City-wide effort to improve financial controls over cash handling.

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## **MANAGEMENT SUMMARY**

In June 1996, a citizen notified us that the cash register receipt he received at the North Transfer Station did not match the cash amount he tendered. In response to this complaint and as part of our on-going review of City-wide cash handling sites, we reviewed financial controls over cash handling and revenue collections at the North and South Transfer Stations.

Beginning in 1991, in response to the discovery of employee theft at the North Transfer Station, Solid Waste Utility management implemented measures to increase the accuracy and accountability of their operations. These measures included improved cashiering and billing systems, upgrades to the scales and computer systems, and improved security. A more detailed description of these measures can be found in the Background section of this report (see pp. 2-3).

During our review, we did not find evidence of any improprieties by the attendants at the transfer stations. We did find transaction errors that suggest management could strengthen supervisory monitoring of the cash-handling system. We also found that the Department did not segregate certain duties within the Transfer Station Billing Section which accounting functions typically segregate, hence weakening the Department's ability to detect errors and irregularities. In addition, the transfer stations do not use video cameras inside their scale houses to monitor cash handling activities, even though these cameras could help deter crime. Finally, we found that the transfer stations could make improvements in their cashiering practices and should consider making fuller use of an

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outside bar code reader to improve scale house efficiency and controls.

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## **BACKGROUND**

The City of Seattle owns and operates two transfer stations for disposing of solid waste: one, in North Seattle at 1350 North 34th Street; the other, in South Seattle at 8100 Second Avenue, South. In serving both residential and commercial customers, these transfer stations took in over \$7.1 million in fee revenues in 1995. In addition, the stations receive the garbage and yard waste which the City's two garbage-collection contractors, General Disposal Co. and US Disposal Co., collect for the City from Seattle residents. The City bases its reimbursement to these contractors on the weight of the yard waste and garbage they deliver to the transfer stations.

Solid Waste management began efforts to upgrade the financial systems at the City's two transfer stations in 1991. In 1993, they discovered that five scale house attendants had been embezzling City funds. In addition to successfully prosecuting the responsible employees and recovering \$287,000 from the City's insurance company, Solid Waste management continued to improve accountability over cash handling operations at the City's two transfer stations, by taking the following actions:<sup>1</sup>

### **Accuracy of cashiering and billing systems**

- Implemented a new transfer station billing system.
- Implemented the "Automated Weighing System" (AWS), in September 1994.<sup>2</sup>
- Implemented parallel review of transaction and weight data by multiple units, including personnel from Transfer Station Billing, Station Operations, and Forecast and Evaluation.
- Began taking Visa and Mastercard in May 1996.
- Began weighing all outgoing trucks instead of using standard empty truck weights to determine how much waste had been dumped.

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<sup>1</sup> The information in this section was provided by Solid Waste management. We selectively verified the information.

<sup>2</sup> AWS is a comprehensive automated weighing and cash handling system that transfers scale weights for vehicles--both incoming and outgoing--directly from the scales into the system's computer and calculates the amount due based on the commodity. The system is set up to handle cash, credit card and billed account transactions. The information collected by the system includes financial, vehicle, frequency, commodity and tonnage data, which is sent on a nightly basis to the Transfer Station Billing System (TSBS) for further processing, billing, tracking, review and reporting.

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### **Upgraded Equipment**

- Improved the accuracy of facility scales by installing new scale load cells in July 1995.
- Began calibrating scales and checking load cells more frequently.

### **Automation**

- Installed new file servers and a tape back-up system for the computers at both locations.
- Upgraded software and modems to improve the transmission of data to downtown for processing.

### **Security**

- Installed new safes in 1995.
- Contracted with Loomis Armored Inc. to pick up deposits and deliver them to the bank.

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## **SCOPE AND METHODOLOGY**

In reviewing financial controls over revenue collections at the two transfer stations, we

- interviewed management and staff of the transfer stations, officials of the Solid Waste Utility and vendors who maintain transfer station software and hardware;
- reviewed the stations' accounting procedures;
- observed operations at the transfer stations;
- performed a surprise cash count;
- reviewed the North Transfer Station manual entries in daily event log reports for ten days during July 1996 and discussed the reasons for these entries with the Solid Waste Transfer Station Billing staff;
- examined all July 1996 transactions in the North Transfer Station's attendants' daily reports, and
- used our comprehensive cash control checklist to assess the adequacy of the financial controls in place at the North Transfer Station (see Addendum A).

We performed our work between October and November, 1996. In performing this audit, we followed generally accepted government auditing standards<sup>3</sup>.

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<sup>3</sup> We followed generally accepted government auditing standards except for Government Auditing Standard 3.33 which requires external quality control reviews of audit organizations every three years. Our office will have an external quality control review in 1997.

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## RESULTS OF OUR REVIEW

Solid Waste should improve: a) supervisory oversight of transfer station cash handling operations; b) controls over transfer station accounts receivable; and c) some cashiering practices. Solid Waste should also use video cameras inside the station houses to improve security and consider fuller use of outside bar code readers.

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### *Need to Strengthen Supervisory Oversight*

We examined transactions of the North Transfer Station July 1996 attendants' daily reports and found the following areas where supervisory oversight should be improved: 1) monitoring of manual transactions; 2) communication with the Solid Waste Accounting Division regarding bank deposit discrepancies; and 3) verification that site crews are randomly checking customer receipts.

1. The scale house supervisor does not sufficiently monitor manual overrides of the computerized system. Transfer station attendants perform various types of manual transactions that override the computerized system controls. Examples include voiding transactions and adjusting for scale errors by manually entering the weights of vehicles. At the time of our review, the supervisor was not reviewing the daily transaction reports to identify manual entries and ensure their appropriateness. Instead the supervisor was relying on the Solid Waste's Transfer Station Billing staff to ensure the attendants did not commit any errors or irregularities when overriding the computerized controls. This proved insufficient in one of the transactions we reviewed, where the manual weight entry erroneously increased the amount of tonnage for which the City's residential solid waste contractor received payment. As a result of our review, Solid Waste accounting staff found and corrected the error and reversed the \$700 the City overpaid the contractor. This was the only error we found out of the 54 manual transactions (ten days worth) which we reviewed<sup>4</sup>. Solid Waste management told us that most errors in manual weight transactions occur at the North Transfer Station between 10:00 a.m. and 2:00 p.m. when there is a lot of traffic.

Several factors currently prevent appropriate supervisory review of computer overrides: inadequacies in the computer software, insufficient supervisory knowledge of the computerized cash handling system, and lack of

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<sup>4</sup> During this same time period, approximately 6,500 automated transactions were also processed at the North Transfer Station.



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appropriate documentation for overrides.

- Identifying the manual weight entries in the transfer station computerized reporting system is presently a time-consuming and tedious process. However, the software vendor for the transfer stations' computer system has recently enhanced the newest version of the software to allow accounting staff to generate a report clearly identifying all manual transactions. The vendor has agreed to install this feature in the City's computer system even before the City upgrades to the newest software version.
  - The transfer stations' computerized system is complex and can be difficult to understand. To be effective in monitoring the cash handling functions of the scale house, the supervisor must have a sound, working knowledge of this system. At the time of our review, the supervisor did not have sufficient working knowledge of the computerized system to effectively monitor cash handling. The supervisor also needs to maintain regular, on-going communications with Solid Waste's accounting division to monitor scale house operations adequately, which was not occurring at the time of our review.
  - Attendants rarely document in the computer comment field the reasons for manual overrides such as manual weight entries, voided transactions.
2. The supervisor is not notified when discrepancies exist between the attendants' shift reports and bank deposits. In the event of discrepancies, the bank sends notices to the Solid Waste Accounting Division, notifying them of imbalances. However the accounting division doesn't forward this information to the scale-house supervisor. This prevents the supervisor from effectively monitoring the attendants' cash overage and shortage reports and investigating the reasons behind any discrepancies.
  3. The supervisor does not verify that the crews at the transfer station dump sites are randomly asking to see customers receipts on a regular basis as they are required to do. The intent of this control is to verify that all customers have properly checked in upon entering the station and are dumping the commodity for which they will be billed.

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***Compensating Controls***

not appropriately segregated responsibilities for handling transfer station accounts receivable or set up a compensating control. The same person who receives customer payments and prepares deposit transmittals also enters the cash-receipt payments into the customer accounts. Appropriate segregation of duties among accounting staff is a basic principle in accounting operations. Assigning both functions to the same person inherently creates the risk of their making mistakes or misappropriating funds without detection. Even if errors or irregularities don't escape detection, pinpointing responsibility is often difficult to impossible without proper segregation of duties or compensating controls.

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***Need to Use Video Cameras to Increase Security at the Station Houses***

Both the North and South Transfer Stations are currently equipped with video cameras inside and outside of their scale houses. However the inside video cameras are not turned on and the cash handling function is not being video taped at either location.

Both transfer stations have had employee theft problems in the past and the North Transfer Station was robbed about a year ago. In addition, the supervisors spend only a small portion of their time in the scale houses monitoring the cash handling process. Using video cameras to record cash handling activity provides a cost-effective way to increase security and discourage attempted robberies, employee theft and other irregularities that may occur. The use of video cameras can help deter crime, providing City employees a safe and secure working environment.

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***Other Cash Handling Control Improvements Needed***

During the course of our review, we noticed two other cash-handling weaknesses:

- Solid Waste Operations management does not require transfer station attendants to perform a blind count when preparing the daily shift report and bank deposit. Currently the cashier prints the ticket summary (showing the amount of cash which should be on hand), then counts the cash. This sequence creates an opportunity for a cashier to "skim off the top" if the cash on hand is more than what the ticket summary calls for. We identified two possible ways to address this risk: a) the cashiers could first count their cash and prepare a balance sheet in ink, then print a ticket summary or b) the supervisor could print and review the ticket summary against the cashier's cash count.
- The attendants do not make a bank deposit during each shift, and cashiers often go an entire shift without

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depositing receipts in the transfer station safe. As a result, the cashiers carry excessive amount of money in the cash register during the day, increasing the potential loss to the City in case of theft or robbery.

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***Management Should Consider  
Strategies for More Effectively Using  
the Outside Bar Code Card Reader***

The City's transfer stations are not making full use of their outside bar code card readers. These devices are located outside the scale houses and are intended to allow customers who have a credit account with the City to process transactions independently of the scale-house attendants. To operate the system, customers insert their cards in the system on their way in and out of the transfer station and the system provides receipts for their transactions. By eliminating scale-attendant involvement, the card-reader system could enhance both efficiency and accountability controls.

Solid Waste management told us that there are currently two operational barriers that prevent more widespread use of the outside bar code readers:

1. Ensuring that the correct card is used for the correct commodity (garbage waste versus yard waste). This is particularly important because the cards are encoded with the rates that pertain to these two types of waste, and these rates differ substantially.
2. Ensuring that the vehicle being weighed stays on the scale long enough to obtain an accurate reading. This is easier to ensure if the attendant handles the transaction, rather than the customer.

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## Executive Action Plan

Working together, Solid Waste management and the Office of City Auditor have identified the following steps Solid Waste management can take to strengthen financial controls over cash handling operations at the transfer stations. Some of these steps have already been implemented and others are in progress.

1. The scale house supervisor should receive training to gain a good working knowledge of the computerized cash handling system.

This training was completed by January 31, 1997.

2. The scale house supervisor should be required to review all reports before forwarding them to the Transfer Station Billing Section and should be in regular direct communication with Solid Waste accounting staff.

Solid Waste management is in the process of programming their computer system to provide additional reports to the scale house supervisor on a daily basis, including reports on voided transactions, manual transactions, and vehicles that leave without weighing out ("skip-outs"). They also plan to provide the supervisor with a daily balance report containing a summary of the previous day's transactions. They anticipate that the system will be operational by March 1, 1997.

3. Station attendants should document the reasons for all manual overrides.

Solid Waste management is in the process of programming their software so that it will automatically default to the comment field if a manual transaction is entered. This should make it easier for the attendants to move more quickly through the system to record their comments and will further enhance internal controls because attendants will not be able to make subsequent entries until the comment field is completed. Attendants have also been reminded of their obligation to fill in the comment field during the interim period before the new programming goes into effect. Solid Waste management anticipates that this system will be operational by March 1, 1997.

4. The scale house supervisor should monitor all manual entries, especially truck weights related to the residential solid waste contractors, since any errors or irregularities in these weights significantly affect the City's expenditures.

This improvement has already been implemented. Manual entries are reviewed by both Transfer Station Billing staff and the scale house supervisor.

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5. Accounting staff should inform the scale house supervisor when there is discrepancy in the bank deposit.

The scale house supervisor is now receiving records of deposits directly from the bank on a monthly basis. Solid Waste management plans to work to obtain a direct contact at the bank for the supervisor, so that the supervisor can receive feedback regarding deposit discrepancies on a daily basis.

6. Scale house supervisors should regularly verify that transfer station site crews randomly review customer receipts.

The station crew chief at each transfer station is responsible for scheduling and conducting these reviews and reporting the results. According to department officials, the station crew chiefs at both the North and South Transfer Stations have been conducting these random reviews since 1989. The scale house supervisor is now receiving copies of the review reports from the station crew chiefs in order to substantiate that site crews do randomly review customer receipts to ensure their accuracy.

7. Solid Waste management told us that staffing constraints prevent them from properly segregating control over transfer station accounts receivable. Therefore, they are currently considering implementing an alternative control to detect errors and irregularities in the accounts receivable system. The Transfer Station Billing System automatically prints a list of all customer payments whenever they are entered into the system. The control would be to send this list along with the payments themselves to the City's Treasury Operations Unit. The Treasury Operations Unit will verify that the total payments received equals the total shown on the audit list. We agree that this is an adequate compensating control because it would prevent employees from crediting customer accounts without depositing the corresponding payments. Solid Waste management anticipates that this change will be implemented by April 1, 1997.
8. Solid Waste management is working on implementing the use of video cameras inside the transfer station scale houses to monitor cash handling activity.
9. The scale house supervisor is working to develop guidelines and procedures that will allow the cashiers to:

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- Count their cash without aid of the ticket summary; and
  - Make a sufficient number of drops each shift to avoid having an excessive amount of money in the register.
10. Solid Waste management plans to explore ways to make fuller use of the outside bar code readers.
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We appreciate the cooperation and professionalism of your staff during this review. We would be happy to work with your staff to provide input on management controls when they are implementing solutions to the issues we identified.

Sincerely,

Nora J.E. Masters  
City Auditor

cc: The Honorable Norman B. Rice, Mayor  
Bruce Brooks, Deputy Mayor  
Councilmember Margaret Pageler, Utilities and Environmental Management Committee  
Councilmember Jane Noland, Utilities and Environmental Management Committee  
Councilmember Sue Donaldson, Utilities and Environmental Management Committee  
Councilmember Martha Choe, Finance and Budget Committee  
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Judy Bunnell, Finance and Administration, SPU  
Nick Pealy, Finance, SPU  
Ed Steyh, Resource Management, SPU  
Mark Jaeger, Field Operations, SPU  
Jeff Neuner, Field Operations, SPU  
Thea Severn, Resource Management, SPU

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## **ADDENDA**

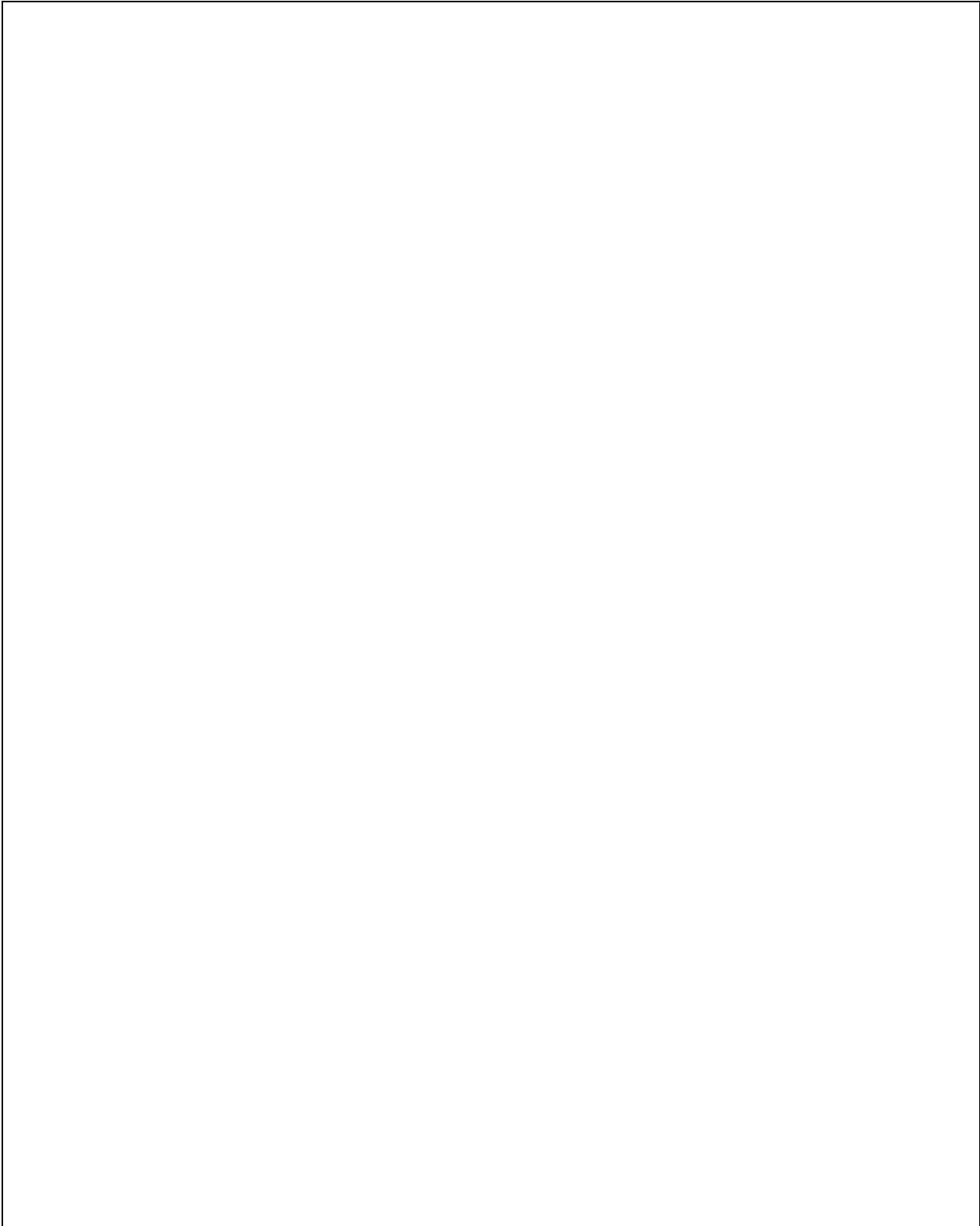
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***Seattle Public Utilities Response to Our Management Letter***

Management Letter Available in Hardcopy Only





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\* \* \* \* \*

Report: **Transfer Stations - Cash Handling Operations Management Letter**  
**(February 28, 1997)**

Please rate the following elements of this report by checking the appropriate box:

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Length of Report			
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